LIST OF CURRENT CLAIMS

1-14 (Canceled).

15. (New) Method for separating gases from a gas mixture, wherein the gas mixture to be treated is passed through a membrane separator by means of a compressor installation that generates heat available for recuperation heating and wherein the compressed gas mixture to be treated is cooled at least in the compressor installation to separate condensate from the gas mixture, after which, as the compressed gas mixture leaves the compressor installation, the compressed gas mixture is re-heated before it is passed through membrane separator, comprising the step: said reheating comprising using recuperation heat of the compressor installation.

16. (New) Method according to claim 15, wherein, during the reheating step, use is made of the heat of the compressed gas mixture at the exit of a compressor element of the compressor installation.

17. (New) Method according to claim 15, wherein, during the reheating step, use is made of a recuperation heat which is drawn from the compressed gas mixture to be treated while carry out said cooling step.

18. (New) Method according to claim 15, wherein the compressor installation comprises a compressor element with liquid injection whose injected liquid is separated in a heated slate at the exit of the compressor element by a liquid separator, comprising, during the reheating step, using the heat of the separated liquid to re-heat the gas mixture.

19. (New) Method according to claim 15, wherein the compressor installation is equipped with a cooler for cooling the compressed gas mixture and in which a cooling medium is heated by the compressed gas mixture and thereby contains heat

available for recuperation heating, comprising using the recuperation heat of the cooling medium during the reheating step.

20. (New) Method according to claim 15, wherein after the cooling of the gas mixture, the gas mixture is passed through a dryer.

21. (New) Method according to claim 20, wherein said dryer uses a desiccant.

22. (New) Method according to claim 20, wherein the dryer is a cooling type dryer.

23. (New) Method according to claim 15, wherein, after the cooling of the gas mixture the gas mixture is passed through a filter or through a set of filters and adsorption elements.

24. (New) Device for separating gases from a gas mixture comprising: a compressor installation having an inlet and an outlet for a gas mixture to be treated, and a membrane separator whose entry is connected to the outlet via a supply line; and a radiator in the supply line through which the gas mixture to be treated flows, said radiator comprising a heat exchanger included in the compressor installation.

25. (New) Device according to claim 24, wherein the heat exchanger is incorporated in a compressed air line between the exit of a compressor element and the exit of the compressor installation.

26. (New) Device according to claim 25, wherein the heat exchanger is a cooler comprising a cooling type dryer of the compressor installation.

27. (New) Device according to claim 24, wherein the compressor installation comprises a compressor element with liquid injection and a liquid separator incorporated in a compressed air line located at the exit of the compressor element,

said exit being connected to the liquid injection system via a return line, and wherein the heat exchanger is incorporated in said return line.

28. (New) Device according to claim 24, wherein the compressor installation includes at least one cooling circuit and wherein the heat exchanger in the supply line to the membrane separator comprises part of the cooling circuit.